

Western Ecological Research Center http://www.werc.usgs.gov

Box Springs Field Station

The deserts of the Southwest, stretching from southern California to southwestern Utah and into Arizona, are experiencing rapid changes due to human activities. Rare, threatened, and endangered species and ecosystem processes are affected by these activities, and their influence will likely increase as the burgeoning human population continues to grow in this region.

The Box Springs Field Station was established in 1974, co-located with the Bureau of Land Management in Riverside, Calif. Scientists here provide natural resource data and management recommendations for land managers throughout the Mojave and Colorado deserts. Many of the management questions they address require interdisciplinary studies that these scientists carry out in collaboration with other USGS researchers in the Geologic Division at Flagstaff, Ariz., and Denver, Colo., the Water Resources Division at Menlo Park, Calif., and Tucson, Ariz., and the National Mapping Division at Menlo Park. Primary clients include the Bureau of Land Management, U.S. Fish and Wildlife Service, and National Park Service, as well as the California Department of Fish and Game, California Energy Commission, and Department of Defense.

Scientists at the Box Springs Field Station conduct research in the Mojave and Colorado deserts on the desert tortoise, its habitats, long-term population trends, causes of ill health and high mortality rates. An important component of the research is focused on effects of natural and anthropogenic changes to the environment, such as the effects of invasive plants and fire on animal and plant populations, desert communities, and ecosystems.

Current research projects on upper respiratory tract and shell disease in desert tortoises are being conducted with collaborators at the University of Florida and within the Geologic Division of the USGS. Other ongoing studies include a fire research program in collaboration with the National Park Service and Bureau of Land Management, raven ecology, and a set of studies documenting relationships of invasive plants with fire, livestock grazing, and off-highway vehicle use.



Science Expertise

Kristin H. Berry, Ph.D., Wildlife Biologist (Research)

- Demography and population trends in desert tortoises
- Health and diseases of desert tortoises
- Anthropogenic effects on desert tortoise populations and habitats
- Anthropogenic effects on Mojave and Colorado desert ecosystems

William I. Boarman, Ph.D., Research Wildlife Biologist, Adjunct Assistant Professor, Department of Biology, University of California, Riverside

- Behavioral ecology and conservation biology
- Ecology of subsidized predators
- Ecological impacts of roads

Matthew L. Brooks, Ph.D., Research Ecologist

- Invasive plant ecology
- Fire ecology
- Effects of livestock grazing
- Effects of off-highway vehicles

For more information, contact:

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